Canadian Centre for Occupational Health and Safety

Centre canadien d'hygiène et de sécurité au travail

Catalogue of Government Expenditures Related to Occupational Health and Safety

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Canadian Centre
for Occupational Health
and Safety

Catalogue of Government Expenditures Related to Occupational Health and Safety

by
•Hushion
•Patterson
•Milligan
and Company Inc.

Canadian Centre
for Occupational Health
and Safety

CATALOGUE OF GOVERNMENT EXPENDITURES RELATED TO OCCUPATIONAL HEALTH AND SAFETY

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Executive Summary

Hushion, Patterson, Milligan and Company Inc. was retained by the Canadian Centre for Occupational Health and Safety (CCOHS) to study the availability of, to collect, and to comment on information on occupational safety and health (OSH) expenditures at all government levels.

One would expect that developing a catalogue of government OSH expenditures would be a relatively straightforward task. Such was not the case as we found that there is no agreed-upon definition of what constitutes an OSH expenditure and there is no consistency in approach to reporting on expenditures.

Relying primarily on expenditure data contained in published government *Estimates*, this report contains expenditure forecast information for the current fiscal year (1984/85) covering a cross section of departments, agencies, and jurisdictions in Canada.

Expenditures that were identified as either partially or entirely directed at occupational- or work-related factors were considered and accounted for as direct OSH expenditures. Likewise expenditures that were directed at non-occupational factors but considered to have some potential relation to OSH were included and identified as "Possible" OSH related expenditures. No totals are provided because the study only covers a sample of government organizations with OSH related programs, and because severe limitations in the accuracy and completeness of the data would make such figures misleading, even had the coverage of the study been complete.

The main value of the study is its discussion of the findings and observations on the quality of the available data and of the implications of these findings with respect to the overall management of government OSH activity.

The limitations of the data are described by:

- dispersion of OSH program delivery responsibilities
- multiplicity of program objectives
- dispersion of funding responsibilities
- lack of specific planning for OSH expenditures
- lack of understanding of relation to OSH
- lack of standardized definitions for OSH, and lack of standardization in reporting on OSH

The extent of these limitations raises questions of accountability and doubts as to whether the taxpayer is receiving value for money. The limitations cannot be ignored in view of the apparent negative relation between the growth in government regulatory intervention and expenditures in OSH over the past ten years and the statistical evidence on OSH performance which shows a rise in health and safety problems.

Executive Summary
continued

Governments are compromised by the poor quality of OSH program and expenditure data in their ability to:

- control overlap and duplication of delivery of OSH-related activities relative to activities in other organizations and jurisdictions;
- assess the appropriateness of expenditures;
- determine an appropriate level of overall expenditure on OSH activities;
- balance the content of the overall program to address the areas of greatest need and to achieve an appropriate distribution of funds; and
- assess the cost-effectiveness of the activities being supported by present funding.

The study identifies potential for collaboration and cooperation in the areas of information collection and dissemination, regulatory development, and inspection/investigation activities.

The study concludes with the following specific recommendations:

- CCOHS should develop and publish a set of standard definitions and guidelines for collecting and reporting on OSH expenditure data;
- CCOHS should obtain the approval and direct involvement of interested governments, departments and agencies in the development of definitions and guidelines, and solicit agreement for their use in expenditure planning and reporting on OSH; and
- CCOHS should undertake further investigation of opportunities for collaboration and cooperation with a view to rationalizing overlaps and/or redundancies. CCOHS should try to coordinate the involvement of interested governments, departments and agencies in specific projects that focus on the major functional activities common to several OSH organizations.

INTRODUCTION

1.1 Background, Scope and Objectives

1.1.1 Background

All levels of government operate OSH-related programs and activities. These responsibilities are often spread across a number of departments and agencies, or distributed within an organization.

The nature of these responsibilities tends to reflect the principal role of the organization concerned. For example, the federal Treasury Board operates OSH activities in relation to its role as the *employer*

Background *continued*

of over 300,000 public servants. The Ontario Ministry of Labour spends approximately half its budget on the operation of an OSH *regulatory compliance* program. Additional roles played by governments in this field include the provision of *services, information and support for research and education*. Some departments like Transport Canada and Environment Canada represent *expenditure cost centres* which operate programs with an indirect interest in OSH, for example, transportation of dangerous goods and control of pesticides.

These activities and programs add up to a substantial investment of people and money across Canada directed at solving and preventing OSH-related problems, yet there is at present no single source of information to provide an overview of what governments are doing and spending in the area. The need for this overview is becoming increasingly apparent as the pressures of budgetary constraint result in major reassessments of the programs, organizations, and roles of government. There is no reason to think that OSH programs and expenditures will be immune from this process.

1.1.2 Scope

Due to time and resource limitations as well as the uncertainty about the availability of information, the scope of the study was limited, and the approach taken was iterative and exploratory.

The study focuses on the public sector. It is recognized that employers and unions, through their own programs and activities, also contribute substantially to the overall investment made in occupational health and safety. For example, the costs of compensation and other activities carried out by workers' compensation boards, which are funded through employer assessments, are estimated to be in the range of 600 million dollars annually. These were specifically excluded from the scope of the study.

While the study is not a comprehensive analysis of all public sector jurisdictions, departments, and agencies supported by taxpayer dollars, it does cover all levels of jurisdiction, and essentially all types of tax-supported organizations with OSH-related programs and expenditures.

The study was not intended and hence not structured as an in-depth analysis of the OSH expenditures of each organization included in the sample. Rather, it was intended to capture program and expenditure information as currently described and published by the departments and agencies concerned. Follow-up in the form of telephone and personal interviews was primarily to seek clarification and elaboration of the data as published in the annual expenditure estimates.

1.1.3 Objectives

The objectives of the study were:

- to study the nature and extent of the data that exist on OSH-related programs and expenditures,
- to identify the critical issues relative to data that limit our capacity to know what governments and agencies are doing and spending in support of OSH,
- to identify potential opportunities for collaboration among departments, agencies, and jurisdictions, and
- to suggest approaches which might address the data-related issues.

1.2 Approach and Method

This section identifies the jurisdictions covered, the sources of information relied upon, how the data were stored, and how the definitions were used.

1.2.1 Programs and Organizations Covered

The catalogue of government programs and expenditures contained in Annexes A, B, and C, as well as the comments on efficacy and utility of the data are based on a sampling of federal, provincial, and municipal jurisdictions.

The sample included the federal government, the provinces of Alberta, Ontario, and New Brunswick, and the cities of Calgary, Edmonton, Toronto, Ottawa, Fredericton, and Saint John.

While the study was not exhaustive in its coverage of Canadian jurisdictions, the sample used was adequate to capture and reflect the various types and ranges of expenditures related to OSH, and more particularly, to allow for comment on the characteristics of the data themselves.

1.2.2 Sources of Information

The primary sources of information relied upon were those generally available to the public. In addition to reviewing government *Estimates*, Annual Reports, and even government telephone directories, we undertook telephone interviews with approximately half the federal, provincial, and municipal departments surveyed. Personal interviews were held with representatives of several federal agencies including the Treasury Board, the Canada Post Corporation, Labour Canada, and Transport Canada. The jurisdictions and organizations covered by the study are identified with each record in the data base.

1.2.3 Data Storage

The expenditures which we were able to identify were recorded in a microcomputer data base using a commercial data base package. This allowed for easy organization of the records, according to one

or more of the descriptive variables associated with each expenditure record. The variables are described in more detail in the following section.

1.2.4 Definitions

The definitions used for the purposes of this study were adapted from Health and Welfare Canada's 1977 publication, 'Occupational Health in Canada - Current Status'.

1. Expenditures *directly* related to Occupational Health and Safety:
   Any form of government intervention which is primarily directed at work-related factors potentially affecting worker health and safety, the resulting effects on health, and the promotion of health and adjustment to work.

   This definition also includes the expenditures of programs and activities which are directed at community health and safety *and*, at least in part, are also directed at occupational factors affecting worker health and safety (for example, transportation of dangerous goods). Thus any program that has at least a component that is acknowledged to be OSH-related is included under this heading even if the expenditure information available does not differentiate between what is OSH-related and what is not OSH-related.

2. Expenditures *possibly* related to Occupational Health and Safety:
   Any form of government intervention which is directed primarily at non-occupational factors affecting health and safety, the resulting effects on health, and the promotion of health and community adjustment and which may possibly have an impact in the realm of occupational safety and health (for example, research into the health effects of various toxic substances).

1.2.5 Analysis

The analysis of and comments on the data are based primarily on the findings from the research done during the course of the study. We were also asked to draw on our experience with and knowledge of government expenditure management systems and the field of occupational safety and health in Canada.

1.3 OSH Expenditure Summary Report

The attached annexes contain expenditure forecast information for the current fiscal year (1984/85) for the Federal Government, the provinces of Alberta, New Brunswick, and Ontario and the municipalities of Calgary, Edmonton, Ottawa, Saint John, Fredericton, and Toronto.

The variables which are identified on the top of the printout sheets are defined as follows:

Organization The name of the government department or agency.

OSH Expenditure Summary Report
continued

Program The vote description which contains the program against which funds are approved for expenditure.

Amount The figure shown is in thousands of dollars ($20,000 will appear as "20").

Category (C) Expenditures which in whole or in part have a *direct* relation to occupational health and safety are identified with a (D). If the activity/expenditure is directed primarily at non-occupational factors but *may* have an impact on OSH, it is identified with a (P), for possible. It should be noted again that any expenditures involving *both* direct and indirect components are identified as direct (D), regardless of their actual relative value, because published expenditure information does not differentiate on the basis of what is or is not OSH-related.

Role Role speaks to how the department or agency sees and gives effect to its mandate. The roles of government relative to OSH which have been identified for this project are:

- Employer (EMPLOYER)
- Regulator (REGLTRY)
- Provider of OSH related services (SERVICEP)
- Developer and disseminator of information (INFODISS)
- Supporter/Provider of research and education (R&E SUPP)

Sector This variable identifies programs and expenditures by sector or field of activity. This permits us, for example, to extract data under the headings of "Labour" or "Environment" across departments and jurisdictions.

Comments This section provides a brief descriptive statement of the program/activity.

The data are contained in the Annexes to this report. It should be noted that no totals are provided. Aside from the fact that this study covers only a portion of the OSH community, the severe limitations in accuracy and completeness of data, as discussed in Part 2, would make such figures misleading even where an entire level of governement has been examined.

Although they are not included in the data sheets, several additional elements are contained in the data base for each record. These are:

Number (NUM) The record number of each item in the data base.

Level (LEV)	The jurisdiction or level of government within which the department or agency operates.
Activity	That component of a program through which governments play their various and specific regulatory and non-regulatory roles with respect to occupational safety and health.
Year	The fiscal year for which the expenditures have been identified.
Type	The specific class of expenditure: organization and management costs (O&M), capital costs (CAP), grants and contributions (G&C). (BTH) indicates that the figure included *both* O&M and capital costs.
Client Group	This variable represents a rather crude delineation between those programs which are primarily directed at workers and those directed at the general public. No attempt was made to break down "general public" into its more discrete component publics.
Source	Identifies the document from which the data have been drawn and/or the individual providing the information.

FINDINGS AND OBSERVATIONS

2.1 Introduction

In addition to collecting basic data, the study was intended from the outset to observe on the general state of health of information on OSH expenditures. During the course of the study, it became increasingly evident that consistent and accurate data were simply not available. This unavailability arises from factors which are discussed in detail in the following sections.

Overall, it can be noted that there is a *conscious lack of interest* on the part of the organizations we contacted in tracking OSH expenditures per se. There were several reasons for this lack of interest, as follows.

Operational Integration: It was argued by Treasury Board and some departmental officials that since the goal is to have OSH considerations fully integrated into the definition of operational plans and budgetary requirements, related expenditures should not be distinguished as separate budgetary items (even if they could).

Introduction
continued

Fragmentation of Expenditure Systems: Each jurisdiction has its own expenditure management system and each organization in turn has its own distinct programs and activities against which responsibilities and accountabilities are structured, and against which plans and expenditures are reported. Expenditure reported on OSH-related activities will vary according to how *direct* and how *critical* the relation of OSH-specific activities are to the overall mission and objectives of the department or agency. Compatibility with another organization's expenditure structure for comparability purposes is generally considered irrelevant to a line manager's responsibility system.

Territoriality: The current expenditure reporting structures lend themselves to the protection of turf in a legal (jurisdictional), political, and an operational sense. Basically this reflects a felt need for control over the activities and resources which impact on the specific publics for whom the minister and his or her organization is politically responsible. It was acknowledged by several respondents that the more difficult is the task of comparing expenditures within and across departments and jurisdictions, the lower is the risk of external challenge to one's program and budget on grounds of apparent overlap and duplication.

Notwithstanding the perceived lack of interest in tracking OSH information, and the reasons for it, it was evident that the difficulties we experienced with collection of expenditure information have implications for the management and operation of OSH activities. These consequences are also discussed in more detail in the following sections of this report.

2.2 Limitations of Data

As noted previously, the information which we were able to collect during the course of this study was at best incomplete, inconsistent, and inaccurate. For one reason or another, OSH expenditures tend to be buried with others (generally primary program delivery costs) and, in some cases, the relation is not even understood by the organization incurring the costs. An analysis of the specific problems experienced in this study identified several apparent root causes of this lack of accurate information. They relate to the lack of identification of OSH-related expenditures within the expenditure management process, the lack of knowledge in departments about relation of expenditures to OSH programs and the lack of a standard basis on which to record OSH information.

2.2.1 Dispersion of OSH Program Delivery Responsibilities

Responsibility for delivery of OSH programs is dispersed in all the organizations examined in this study. A prime example of this exists within the federal government in relation to its role as employer.

Program Delivery Responsibilities *continued*

The safety guidelines for federal government employees are developed through negotiations between the public service unions and the Treasury Board. The products of these negotiations are submitted to the National Joint Council's Occupational Safety and Health and Physical Working Conditions Standing Committee. This Committee then decides whether to accept or reject the recommendations. Those that are accepted are then submitted to the Executive Council of the government for approval. Those that are approved there become part of the Treasury Board Safety Regulations and Guidelines.

It is the responsibility of the safety and health units within the personnel branch of each department to translate these guidelines into policies that relate to their own departmental objectives. These policies in turn form the basis for departmental OSH expenditures which are incorporated, but not necessarily accounted for, in both personnel and line branch budgets. It was noted by most federal OSH officials within the personnel function to whom we spoke that the operating budget for corporate OSH activities is part of the overall personnel or administration program and budget for the department, and that OSH expenditures are not broken out separately.

The difficulty of extracting OSH-specific expenditure is compounded in situations where responsibilities for OSH matters fall to individuals with other duties. Several examples of this type of circumstance were identified in the study.

The Safety Officer at the Department of Fisheries and Oceans noted that the Department's own Regional Safety Officers, who are responsible for departmental inspections in the field, often have other responsibilities unrelated to occupational health and safety. They may be part of the Administrative division in the region but are also requested to double as Safety Officers when the need arises.

Another example was evident in the Department of National Defence, where certain ships' officers have "occupational safety" as a part of their overall responsibilities for the safety of a ship and its crew ("Damage Control"). These responsibilities, which are common to many positions in the armed forces, are not disaggregated to the point where it is possible to extract OSH-specific expenditures.

A similar situation was apparent in Saint John, New Brunswick, where it was noted that there was one officer specifically assigned to OSH, and the remainder of the safety work was done on an ad hoc basis by the rest of the Personnel division.

In each of these examples, even the direct personnel costs of meeting OSH obligations were incapable of being identified.

Tables 1 and 2 were prepared from data obtained after the study had been completed. These data go some way to illuminating the costs

Program Delivery Responsibilities *continued*

of OSH 'prevention' by governments, but they by no means show the complete picture. Costs total over one hundred million dollars.

2.2.2 Multiple Program Objectives

OSH expenditures tend to be incorporated as one element of larger (operational) programs in many cases. For example, a senior OSH representative of the Department of National Defence indicated that the costs of construction of the new Ship Repair Unit facility in Halifax reflected their concern about the poor safety record of the Unit and the desire to ensure that the new facility was "state of the art" from an OSH perspective. OSH personnel and OSH considerations on the part of line management had a substantial influence on the layout of the building, the organization of work areas, the selection of equipment and safeguards including high performance ventilation, lighting, and noise reduction systems, and the provision and location of locker and shower facilities. It was acknowledged that OSH considerations added "substantially" to the construction costs of the new building but that it would be impossible to break out those costs.

Another example relates to the protection of aircraft and personnel involved with their operation. Prior to engine startup, the combined responsibilities for the safety of aircraft and personnel rest primarily with the ground crew. They are transferred to the pilot as soon as the aircraft engine is engaged.

Shared responsibilities for health and safety, including expenditures for care of personal protective equipment, specialized facilities, special safety-oriented training programs for both air and ground crews, detailed procedures governing the operation and maintenance of aircraft, and other elements are all considered an integral part of the normal operational expenditures for maintaining a flight operation. The same can be said for costs of design and construction of special safety-related equipment and materials in the aircraft itself, such as noise reducing materials, fire-extinguishing equipment, strengthened bulkheads for transportation of toxic substances, and so on.

In this example, the objectives related to protecting the well-being of the air and ground crew are merged into the overall objective of maintaining an effective flight operation. The roles carried out by each group in respect of diverse operational objectives do not themselves differentiate what is and is not specifically an OSH-related responsibility. Since OSH-related responsibilities are totally integrated with other non-OSH responsibilities, it is virtually impossible to identify the percentrage of person-year expenditures as specifically OSH-related.

In all these cases, it is impossible to apportion expenditures between OSH-specific and other operational concerns. Similar circumstances were found in most programs, whether capital or operating, at all levels of government.

2.2.3 Dispersion of Funding Responsibilities

In departments with regional operations, it was noted that the headquarters office was not necessarily aware of OSH expenditures in regional offices. Often, these expenditures could not even be identified by the regional offices themselves. For example, all purchases of safety equipment, first aid kits, and similar items were simply lumped together with other regional purchases. An accurate determination of OSH-related expenditures would require a detailed review of purchase invoices for an entire year.

In New Brunswick, another problem relating to dispersion of funding was encountered. In that province, the Technical Services Branch of the Department of Transportation fulfills a safety function on behalf of the employees of that Department, who are assigned to various regions serving different sections of the province. The headquarters office is not assigned a budget; instead, the safety coordinator at the headquarters office charges his services and associated overhead and other expenses to the regions. He does not maintain records on these charges himself, and a detailed analysis of the billings to the regions would therefore be necessary to determine an overall level of OSH activity.

This method of financial administration differs markedly from other provinces where OSH activity is more centralized, and where services rendered are not charged back to the client. Such inconsistency makes comparison across provincial boundaries difficult.

There are two additional examples which address the complexity of funding arrangements. One shows how different sources of funding for similar activities can make comparability of OSH-related expenditures difficult. The other illustrates how expenditure planning and control on the part of one jurisdiction can be hampered where program costs are effectively under the control of several other jurisdictions.

In the first example, it was noted that in New Brunswick the Workers' Advocacy Branch operates under the auspices of, and is funded by, the provincial Department of Labour and Human Resources. In Ontario, a similar activity is operated and funded directly by the Workers' Compensation Board. Thus in New Brunswick workers' advocacy is a public expenditure, whereas in Ontario the same activity is funded by the W.C.B. out of the revenue it receives from employer assessments. The former is within the scope of this study; the latter is not.

The second example concerns the administration of workers' compensation benefits for federal government employees. According to a representative of the Injury Compensation Respecting Government Employees and Merchant Seamen Division of Labour Canada, responsibility for the administration of compensation entitlements to federal employees rests with the various provincial workers' compensation boards. Compensation payments made to federal

Funding Responsibilities *continued*

employees by a provincial board are subsequently reimbursed by the federal government.

The level of compensation benefits payable is regulated separately by each provincial jurisdiction, and the entitlements vary accordingly. This means that a federal government employee in Ontario, injured on the job and entitled to compensation, receives a different level of benefit than if he or she had been resident in British Columbia at the time of the jury.

It was alleged that this arrangement with the provinces makes expenditure planning at the federal level difficult because of the lack of effective control over the level and timing of entitlement changes.

2.2.4 Lack of Specific Planning for OSH Expenditures

Except for certain organizations which are charged primarily and specifically with administering or controlling OSH activities, no planning and reporting of related expenditures takes place within the normal budget management system of any jurisdiction. As a result, there are no explicit historical records of OSH expenditures in what we had considered our primary data sources.

Normally, the OSH division of each organization's personnel branch receives funds when the need arises. In some cases, the items have been specifically budgeted for but are not readily identifiable against OSH activities, since they are rolled up at the corporate level. For example, when travel funds are required to attend meetings of the regional safety committees, the safety officer submits a request to the head of personnel, and the funds are allocated out of the branch budget (assuming sufficient funds remain in that line item account). If the funds had not been budgeted to cover unexpected meetings with safety committees, it would be up to the authorizing authority to decide whether sufficient funds remain elsewhere in the account to cover the requirement.

Another example is funding for OSH-related training. This will normally be included as part of the corporate training budget or integrated into the training budgets of individual operational programs. There were very few examples where we found an item like OSH-related training identified as a discrete expenditure item. These were limited to the "large ticket" organizations like the Department of National Defence and the Canada Post Corporation.

As in other circumstances identified in this report, the available data are generally limited to "best guesstimates" on the part of individuals who are involved in the delivery of the function, though they may be neither accustomed nor trained to think of management information requirements.

2.2.5 Lack of Department Understanding of Relation to OSH Programs

In our initial examination of the *Government Estimates*, we found that certain programs were described as having OSH-related expenditures. It rapidly became evident that the departments themselves could not provide specific information on what these were. For example, the *Estimates* state that the National Research Council (NRC) is responsible for the administration of the Weights and Measures Act, part of which deals with weights and measures pertaining to occupational health and safety.

In followup phone calls we were unable to determine a locus of responsibility for the administration of the Act, and neither were we able to readily obtain more descriptive information on those aspects of NRC's role that pertains to OSH. As a result, it was impossible to make any specific determination of the extent to which expenditures could be associated with OSH.

A similar problem was encountered in other organizations, such as the Canadian Oil and Gas Lands Administration (COGLA), an agency of the federal government which reports to Parliament through the Minister of Energy.

2.2.6 Lack of Standardized Definitions for OSH

A recurring problem which we encountered in trying to collect information on OSH expenditures, especially those "buried" in other program budgets, was the lack of accepted standards for what comprises an OSH activity. This shortcoming was recognized by the Treasury Board's Occupational Safety and Health Division. As a result, even "direct" expenditures, which should be easily identifiable, were inconsistently recorded in different organizations (for example, salaries for individuals having OSH responsibilities).

This is to some extent a consequence of the declared interest in integrating OSH considerations with normal program delivery activities. Without guidance on how to categorize activities, it was not surprising that few organizations maintained information on a consistent basis.

The problem is compounded for those activities and expenditures which are not directed at OSH per se but could have impact on OSH activities and budgets. They range widely in relevance to OSH, from toxicology research (which would presumably have to be undertaken directly by OSH interests were the information not available elsewhere) to environmental cleanups (which could, under certain circumstances, affect working conditions at particular sites). In these cases, it was impossible, within the limitations of the study, to provide any clear measure of relevance for any of the expenditures listed as having a *possible* impact on OSH. Even were clear criteria to be provided to a study team, it would remain a matter largely of judgement based on subject knowledge how expenditures should be categorized.

A further distinction must be made between *expenditures* and *costs*. The expenditure management systems of governments focus largely

Standardized Definitions *continued*

on those items which ultimately result in an actual disbursement of public funds. To the extent that such expenditures are reported against a specific OSH-related activity such as "Regulation", "Inspection", or "Research", they can be identified as direct OSH expenditures. In these cases, for example, salary costs attributed to an operational activity are made up of the direct costs of salary level and benefit entitlement paid out to an employee for a particular job.

These cost data do not include the *indirect* costs associated with miscellaneous entitlements and activities that impact on availability for work, or level of performance. Indirect costs may not necessarily impact on the level of expenditure, but they do affect productivity.

Some indirect costs are OSH-related. Most are difficult to document and quantify. Examples include time off the job on OSH-related training, time off on injury on duty leave (which affects not only the productivity of the individual taking the leave, but also of other employees in a work unit), and management and employee time required in the preparation for, participation on, and follow up to, joint health and safety committees.

The Canada Post Corporation provides an illustration of the indirect but unaccounted-for costs associated with joint health and safety committees. The Corporation currently has approximately 400 joint health and safety committees. Each committee has six members, three representing management and three representing unions. Each committee meets at least once a month for half a day. Based on a 220 day budget calendar year and an average total salary cost (including benefits) of $45,000, the specific indirect OSH-related cost of participation in the mandatory joint committees is conservatively estimated at sixty-six person-years and three million dollars.

Because there is no agreed-upon definition of what constitutes an OSH-related expenditure, and because direct O&M expenditures can contain associated indirect but unreported OSH costs, it is reasonable to suggest that "OSH value" of public expenditures is probably substantially higher than what is identified and reported on through current expenditure management systems. In other words, governments' actual investment in OSH is greater than what is formally reported, and perhaps substantially so.

2.2.7 Lack of Standardization in Reporting

Even in cases where OSH expenditures are identified as such, there exist diverse methods of reporting. For example, the *Estimates* of the Alberta government break out OSH expenditures into capital and O&M. Ontario, on the other hand, records expenditures as one lump sum. Considerable effort would have to be devoted to investigating the specifics of each reported expenditure in order to ensure comparability.

2.2.7 Lack of Standardization *continued*

In addition (and probably as a consequence of the lack of basic agreement on what OSH is), there exists no commonly recognized taxonomy for categorizing activities or expenditures. In the absence of such a framework for reporting information, the consistency of the data gathered is inevitably suspect.

2.3 Implications of Limitations in Data

The limitations in availability and quality of data which were encountered in this study can reasonably be presumed to be experienced by other groups interested in OSH, including functional managers. The implications of these shortcomings for the overall management and coordination of OSH activities are clearly significant, since information is essential to effective planning and control of any function or activity.

Defining solutions to the problem is not a trivial task, since the responsibilities for delivering OSH programs and activities are so widely distributed across jurisdictions. Common wisdom holds this distribution as necessary to ensure that OSH is an integral part of any program or operation, but it makes standardization of information and data collection reporting an extremely difficult proposition.

Tables 1 and 2 show 'prevention costs' total more than one hundred million dollars, but this is only part of the time total. Without adequate data on the level and nature of all expenditures, there can be no accountability for the increasing expenditures (which are increasing) on OSH-related activities. Managers are compromised in their ability to:

- control overlap and duplication of delivery of OSH-related activities with activities occurring in other organizations and/or jurisdictions;
- assess the appropriateness of expenditures (that is, whether they have been incurred in support of activities which fall within the functional framework governing the organization's OSH responsibilities);
- determine an appropriate level of overall expenditure on OSH activities;
- balance the content of the overall program to address the areas of greatest need, and to achieve an appropriate distribution of funds between all aspects of the program (for example, between safety and health concerns, research and compliance activities, and so on); and
- assess the cost-effectiveness of the activities being supported by existing funding (no cost-effectiveness studies of OSH expenditures appear to have been undertaken, even in the central agencies contacted in the course of the study).

Implications
continued

The information vacuum and the resulting constraints on the management of OSH activities, combined with the severe fragmentation of jurisdictions and delivery mechanisms which was noted earlier, point to the possibility of inappropriate and possibly wasted expenditure. While this cannot be proven, it can be said that current inadequacies in data make it virtually impossible for governments to provide reasonable assurance that they are obtaining value for money being expended directly and indirectly on OSH in Canada.

2.3.1 A Case for Reassessment of OSH Activities

The significance of this statement must be assessed on the basis of mixed circumstantial and hard data. While we cannot say exactly how much is being spent on OSH, politicians and bureaucrats responsible for OSH programs, particularly those that are regulatory, health-oriented, or directed at the private sector, will readily acknowledge that their OSH budgets have increased "dramatically" over the past ten years (see Annex D). However, the hard data on accident rates, incidence of so-called occupational disease and workers' compensation costs clearly demonstrate that the issues and problems of OSH are not diminishing; indeed, the contrary may be true.

The expectation that greater government regulatory intervention and investment in OSH programs and services would be sufficient to address the major problems of OSH, and therefore diffuse the attendant political pressures has not materialized. The reasons for this are multiple and complex. There are several signals which lead to the proposition that the system of OSH expenditures may be ripe for a major evaluation.

First, current program expenditures are under considerable pressure as governments attempt to address their respective deficits while balancing the distribution of limited resources among competing political demands. Because of limited budgetary flexibility, governments are paying more attention to the political benefits potentially associated with any new initiatives. The same holds true for existing programs that are subject to review.

The second signal is that governments, at the federal and provincial levels, are still subject by and large to the same political pressures as they were in the 1970s. OSH programs and expenditures have not produced greater levels of political satisfaction.

Organized labour continues to be critical of governments' efforts, arguing the need to "do more" to address the OSH "problems" which persist. Available statistical data on incidence of industrial accidents and disease and related compensation claims are used convincingly to support the criticisms.

On the other hand, employers are expressing concerns to governments about the rising costs of compensation. Since 1980, not only have employer assessments grown substantially, but also the rate at

Reassessment *continued*

which they have been growing has increased dramatically, especially in comparison with the seventies.

It is our understanding that some employers have expressed concern about a perceived political and bureaucratic predisposition on the part of governments to expand the basis of compensation entitlement through the inclusion of certain diseases which are labelled "occupational" even though in medical and scientific terms they are recognized as difficult to define, so far as cause is concerned.

The bottom line for some employers is simply that the lack of any "reasonable" correlation* between the trend in compensation costs and the expenditures of governments (focused on improving occupational health and safety) raises a serious question whether governments have been focusing their attention and resources on the right OSH issues.

Whether governments (and through governments, the taxpayers), have received adequate "value" for the expenditures on OSH represents, in our view, a serious question. An equally serious question is how to go about answering it. The concerns of the two major OSH client groups of governments, when coupled with the internal pressures of budgetary constraint, suggest that it may be appropriate for governments at least to begin addressing the second question in the event that finding an answer to the first becomes a political imperative.

2.3.2 A Case for Comparative Data

If the question of "value for money" is posed, the issue will not be OSH per se, but the availability and adequacy of the relevant *data* and the *criteria* which will be applied to interpret the data.

Expenditure data serves a specific purpose related to expenditure management within a particular organization and management system. While these data may be adequate for this essentially "internal management" purpose it is our opinion that they are inadequate for addressing, on any global comparative basis, crucial to an evaluation. Key questions include:

1. How much are governments individually and collectively spending on OSH?

2. What are they spending it on (that is, what specific programs, activities, and sub-activities are being directly or indirectly supported by governments?)?

* There is a strong correlation: both compensation costs and government activities aimed at improving OSH have been rising strongly over the past decade. This is not a reasonable correlation in the sense that expenditures on prevention should be followed by a reduction not an increase in compensation costs.

Comparative Data *continued*

3. What specific OSH problems are these programs and expenditures directed at? What performance measures exist to assess whether the programs are targeted adequately and the resources utilized properly? How does performance rate against these measures?

One of the serious deficiencies from an evaluation perspective is that the quality of existing OSH data makes it extremely difficult to track the linkages between "problem identification", "selection of modes of intervention", and "program organization, operation and resourcing" in order to arrive at conclusions about "value for money" and decisions that are defensible.

Another problem with current published expenditure data is that they do not disaggregate program information sufficiently to identify subactivities and functions which represent the real substantive opportunities for collaboration and cooperation across departments, agencies, and jurisdictions. We cannot, for example, readily determine how much is being spent in Canada on the planning and evaluation of OSH, nor how much is being spent on the collection and dissemination of OSH-related information, nor on the development of occupational health standards, nor on inspection and enforcement-related activity.

OSH problems and solutions have no intrinsic respect for the myriad of programs, organizational structures, and expenditure cost centres represented in government. The risks related to exposure to asbestos do not depend on whether the employee works for the Canada Post Corporation under the jurisdiction of Part IV of the Canada Labour Code, or whether he or she works at the Johns-Manville Corporation in Toronto, regulated under Ontario's Occupational Health and Safety Act.

Unfortunately (in this example), our system of policy development and program delivery are based largely on constitutional authorities. There is further a perceived need on the part of politicians and bureaucrats for control over the programs and resources for which they are politically responsible and accountable. Present policy development may or may not necessarily reflect the optimal way of mobilizing public resources to address a complex societal problem like OSH.

A consistent body of data would not solve these problems, but it would provide a basis for communication and, therefore, a foundation for better coordination and direction of OSH expenditures.

2.4 Opportunities for Collaboration and Cooperation

When this study was initiated one of the tasks contemplated was identifying areas of potential overlap and duplication. As the study progressed and the inadequacies of the available data became more and more apparent, it was agreed that such a task would require substantially more research and analysis than was possible within the scope

Opportunities for Collaboration and Cooperation *continued*

of the present study. In view of the sensitivity of the subject matter it would have been most inappropriate to be making allegations of potential overlap and duplication on the basis of poor and incomplete data.

Although the available data were not adequate for that purpose, our close scrutiny did allow us to raise certain hypotheses which might be the subject of future study by the Centre. In raising these hypotheses we are not necessarily inferring that there is a problem. More in-depth study would be needed to test these hypotheses to determine whether indeed there are real opportunities for collaboration and cooperation.

Three areas are identified for discussion and future consideration. They relate to *information collection and dissemination, regulatory development,* and *inspection/investigation* activities.

Hypothesis 1

Information Collection and Dissemination

There are numerous departments and agencies within and across the various levels of government that collect and disseminate basically similar occupational health and safety information on hazards/risks, preventive and remedial measures, and sources of assistance. There are economies and efficiences to be gained from rationalization of these activities.

The key information players are the Centre, all Departments and Ministries of Labour, OSH Commissions, Transport Canada (Transportation of Dangerous Goods), Health and Welfare Canada, Workers' Compensation Boards, and accident prevention associations. Any person or organization wanting information on the health effects of exposure to a particular toxic substance, for example, can get basically the same information from several government departments and agencies.*

Expenditure data does not disaggregate OSH program expenditures to the level that would allow ready determination of what departments and agencies are spending on OSH information. It is our understanding that most major OSH organizations collect and analyse similar OSH information for a variety of purposes and either actively or passively disseminate it, primarily to those interest groups for which they have some regulatory responsibility. An in-depth analysis may identify duplication in direct information services as well as opportunities to reduce related information overhead such as administration, inventory maintenance, and information distribution system related costs.

* CCOHS does not concur on this point. Its experience shows that the Centre's information work produces information which is sometimes substantially more comprehensive than that which is available from government departments. Certain of these departments use CCOHS as a resource for the more difficult questions which they receive.

Hypothesis 2 — Regulatory Development

Each government has its own regulatory process for developing health and safety legislation and regulations. While the substance of OSH issues and the availability of information on hazards and risks tend to be common across jurisdictions, the process of regulatory development is discrete in a legal/jurisdictional sense. Thus each jurisdiction essentially does its own research and analysis to provide the basis for its health and safety standards. Opportunities for collaboration and cooperation on OSH research and planning might be identified so as to make better use of Canadian OSH R&D resources without impinging on the political process within each jurisdiction.

The regulatory process relating to OSH in Canada has been heavily influenced by the U.S. experience. We rely extensively on U.S. OSH research and we react to their regulatory experience. Because the OSH research and planning capability within each Canadian jurisdiction is limited, it has been more efficient, as well as politically expedient, to focus on what others are doing (or urging) in regulation rather than doing substantive coordinated research and analysis into OSH problems, and their causes, and the effects of specific regulation.

Extensive regulatory development has accompanied the growth of government OSH-related expenditures in Canada over the past ten years. The apparent lack of positive impact of some or even most regulatory programs across jurisdictions would suggest that they might well benefit from closer collaboration among jurisdictions on research, planning, and evaluation related to OSH regulatory programs.

Hypothesis 3 — Inspection/ Investigation

All regulatory departments and agencies currently have their own separate inspection/investigation capability. Some of these organizations carry out similar activities within the same geographical areas, the only difference being the specific industry and the jurisdiction to which it is subject. Similarities in regulatory compliance programs, logistical considerations related to ensuring adequate jurisdictional coverage, and duplication of associated administrative overhead costs suggest that opportunities for collaboration and cooperation may exist among some departments, agencies, and jurisdictions.

This is recognized as a sensitive "control" issue because of its direct relation to the political credibility of any regulatory initiative. While program expenditure data do not enable us to determine what departments and agencies within different governments are spending on regulatory compliance (and more particularly on inspection/ investigation activity), we do know that the function is essentially "cloned" from one regulatory authority to another. Again the key differentiating factor is not the role or the geography but the jurisdictional responsibility.

Inspection/ Investigation *continued*

Inspection/investigation activity is an interesting item because for years it was an area of extensive cooperation between the provinces and the federal government. Indeed, federal-provincial agreements providing for the subcontracting of inspection services to the provinces by the federal government were looked upon as a model for cooperative federalism. Cooperation gave way to the perceived need for organizational and operational independence as OSH became a dominant political issue in the late seventies.

In view of the pressures that are now associated with restraint it may be timely to reassess the opportunities among regulatory organizations to rationalize the deployment of operational resources engaged in inspection/investigation activity.

The above does not in any way represent an exhaustive list of potential opportunities. While the scope of this study precludes any definitive findings of potential overlap and duplication, we are of the opinion that opportunities for collaboration and cooperation, such as those identified above, do in fact exist.

We are also of the opinion that any benefits that might be realized are dependent on obtaining prior agreement and commitment from any organizations asked to participate. Another important consideration is the need to obtain agreement on the information that would be required from the participating organizations, as well as the criteria against which the information would be assessed.

Because the opportunities identified in this section represent potentially sensitive issues it might be appropriate to think of establishing one or more pilot studies. The pilot(s) could focus on a small but representative sample of organizations and jurisdictions and be set up so that the participants, through a steering committee structure, effectively controlled the pilot's terms of reference.

2.5 Recommendations

Given the status quo and the unlikelihood of any short-term structural changes in the distribution of jurisdictions or the way OSH-related services are delivered, there is limited scope for action by which the Centre could ameliorate the major shortcomings in expenditure information. Since it has no mandate for direct management or coordination of the OSH function, the Centre is constrained to adopting a leadership and guidance role, and to encouraging other players to strengthen their individual effect by voluntarily participating in a coordinated thrust to improve the information base on which rational management of the function must be built.

Recommendation 1

CCOHS should develop and publish a set of standard definitions and guidelines for collecting and reporting on OSH expenditure data.

The major initiative which falls directly within the scope of operation of the Centre itself is the development of a set of standardized

Recommendation 1 *continued*

definitions for OSH-related functions, and guidelines for the reporting and collection of OSH expenditure information.

The need for common definitions was evident early in the course of the study. A great deal of discussion, for example, took place about the extent to which certain expenditures could be related to OSH. It was agreed that *direct* expenditures could be relatively easily defined as those which were incurred *primarily* in support of OSH-related activities. Many other expenditures were identified, however, which could impact in OSH. The relevance of those costs ranged from fairly direct (as in the case of toxicology research) to extremely vague (for example, environmental cleanup funds), and the study team found it very difficult to judge where to cut off its information in the absence of specific criteria.

Agreements on methods of reporting and collecting information on an ongoing basis within a standardized framework of definitions would clearly make possible the kind of information necessary to evaluate, rationalize and focus OSH expenditures.

Recommendation 2

CCOHS should obtain the approval of and directly involve interested governments, departments, and agencies in the development of definitions and guidelines, and solicit agreement to use them for expenditure planning and reporting on OSH.

Obtaining approval for the definitions and guidelines and agreement to use them will test the Centre's marketing and coordination abilities. The current climate of proclaimed cooperation between levels of government and the high interest at all levels in efficiency and economy conspires to support the Centre in this endeavour. In light of some of the potential savings discussed in the following section of this report, the Centre enjoys a good opportunity to assume a leadership role in promoting the rationalization of an information base for management decision-making on OSH programs. If some consensus can be achieved in this regard, the Centre's role as a repository of information will be strengthened at the same time that improvements in the management of OSH activities take place.

Recommendation 3

CCOHS should undertake further investigation of opportunities for collaboration and cooperation with a view to rationalizing overlaps and/or redundancies. CCOHS should coordinate the involvement of interested governments, departments and agencies in specific projects that focus on the major functional activities common to OSH organizations.

Even in the face of the limitations in data which were encountered in this study, it was apparent that some evidence exists for the potential to achieve savings through rationalization of activities which are undertaken by different jurisdictions. Information dissemination, inspection, and research related to OSH seem to hold the greatest promise in this regard. In order to assess just how much potential for

Recommendation 3
continued

savings or improvements in effectiveness exists, the Centre could undertake more detailed investigations of the jurisdictional and practical interrelation in delivering these services.

While the Centre is a logical situs for undertaking a national study of this kind it is vital to the success of any such study that it be fully supported by the governments whose programs would be included for study. One way to approach a delicate subject like this one is to undertake an evaluability assessment in the form of a pilot project. It could be restricted to two or three specific activities such as those referred to above, and limited to a small but representative cross section of departments, agencies, and jurisdictions willing to participate. It would also be appropriate, if not requisite, to obtain prior agreement on the methodology and approach to be used by the Centre for a) identifying the potential opportunities for collaboration and coordination and b) the specific nature which such collaboration might take. A decision could then be based on the results of the pilot, whether the study should be expanded.

TABLE 1

Operating Statistics [10] OSH Regulatory Agency Operations 1984 - 85

Federal-Provincial Jurisdictions[11]

	LAB CAN[9]	NFLD	NS	PEI	NB	QUE	ONT	MAN	SASK	ALTA	BC
Operating Costs ($000) (Excl'g Salaries)	2300	700	421	54	1000	9550[8]	9100[7]	680	1000	2400	2520
Operating Staff (Person-Years)	149	40	29	4	46	610	726	68	42	224[3]	198[4]
1000's of Establishments (Served)	34	10	2	2.2	12	182	172	21	36	63[2]	140[5]
Operating Staff per 1000 Establishments	4.34	4.0	2.4	1.8	3.8	3.4	4.2	3.2	1.2	3.6	1.4
1,000's of Workers (Covered)	844	140	227	22	250	2009	3400	520	450[1]	830	1300[6]
Operating Cost ($) per Worker	2.73	5.00	1.85	2.45	4.00	4.75	2.67	1.31	2.22	2.89	1.94
Operating Staff per 1000 Workers	0.18	0.29	0.13	0.18	0.18	0.30	0.21	0.13	0.09	0.27	0.15

NOTE

1 (Sask), Includes 90,000 Agricultural Workers
2 (Alta), includes 53,000 Employers
3 (Alta), includes medical surveillance of workers for silicosis, pneumoconiosis, etc
4 (BC), includes medical surveillance of workers for silicosis, occupational hearing loss and and exposure to lead, mercury, berilium fluoride, cadmium
5 (BC), includes 6,000 registered farms
6 (BC), includes 10,000 agricultural workers
7 (Ont), includes $1,200 thousand of lottery funds for Ministry of Labour approved projects
8 (Que), includes funding for sector associations, etc
9 (LC), does not include any occupational health role for 250,000 public servants
10 These data were obtained by the CAALL-OSHC Technical Secretariat in a telephone survey. Order-of-magnitude accuracy was requested.
11 Table supplied by Labour Canada.

TABLE 2[2]

Person-Years and Costs, OHS Regulators Agencies

	LAB CAN[9]	NFLD	NS	PEI	NB	QUE	ONT	MAN	SASK	ALTA	BC	TOTAL
Operating Staff (Person-Years)	149	40	29	4	46	610	726	68	42	224	198	2136
Operating Staff [1] Salaries ($000)	5066	1360	986	136	1564	20740	24684	2312	1428	7616	6732	72624
Operating Costs ($000)	2300	700	421	54	1000	9550	9100	680	1000	2400	2520	29725
TOTAL COSTS ($000)	7366	2060	1407	190	2564	30290	33784	2992	2428	10016	9252	102349

NOTE

1 $34,000 taken as average salary cost per person-year
2 Table prepared by the Canadian Centre for Occupational Health and Safety

ANNEX A

OSH Expenditures Fiscal Year 1984/85

Federal

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Can Adv Council	StatWomn	80.0	D	Infodiss	Gen	Advisory Council on the Status of Women conducts research on women's issues. Amt shown is cost of study on women and VDT's. Only one on OSH.
Can Agriculture	Agrifood	18491.0	P	Infodiss	Agr	Research & info related to processing, distributing, retailing & consumer concerns: a % of this is spent on chemical contaminants in feedstuffs.
Can Agriculture	Personnl	65.0	D	Employer	Lab	The figure represents the salary of one of the two safety officers and one half of the support clerk's salary. The remainder is spent on security.
Can Atomic Enrg	AECB	20167.0	P	Regltry	Gen	Atomic Energy Control Board: provides for the control of the use of atomic energy in Canada - budget amount verified by phone call.
Can C&C Affairs	Stds Cnc	6612.0	P	R&E	Supp	Gen Consumer and Corporate Affairs: Grant to the Standards Council of Canada.
Can Cdn Ctr OSH	OSH	5045.0	D	Infodiss	Lab	Canadian Centre for Occupational Health and Safety: to promote the fundamental right of Canadians to a healthy and safe working environment.
Can Eldorado Nc	Safety	4427.0	D	Employer	Lab	Crown Corporation - Expenditures on radiation protection equipment, training and workers' compensation.
Can Employ & Im	Personnl	108.9	D	Employer	Lab	The figure represents $7320 for admin expenses, and $101,628 for salaries of the HG safety officers. Only dept. that had their exp. broken out.
Can Enrg Mn & R	COGLA	10182.0	P	Regltry	Bld	Cdn Gas Lands Administration: to ensure compliance with regulations governing the development of oil and gas - in conjunction with DIAND.
Can Enrg Mn & R	Pet Ownr	1669.0	p	Regltry	Bld	Petroleum ownership, control & incentives: a % of this deals with prevention of leakage.
Can Enrg Mn & R	Explosiv	1978.0	P	Regltry	Gen	Explosives Branch is responsible for public safety with respect to explosives. Figure includes $645,000 for lab services.
Can Environment	Admin	2370.0	P	Regltry	Env	Federal Environmental Assessment and Review Office develops guidelines for environmental impact assessments.
Can Environment	Env Serv	63119.0	P	Regltry	Env	Environmental Protection is responsible for the enforcement of environmental protection measures.
Can Environment	Env Serv	7.0	P	R&E Supp	Env	Included in the amount shown for record 48. Grant to the Canadian National Committee of the International Association of Water Pollution Research.

Federal
continued

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Can Environment	Env Serv	8500.0	P	R&E Supp	Env	Contributions to toxicology centres Guelph and Toronto. Expenditures are included in amounts shown in record 48. Govt has announced it will cut this.
Can Environment	Env Serv	13.2	P	Infodiss	Env	The Air Quality Services and Atmospheric Research Branch of the ATMS Environment Program deals with research on acid rain etc.
Can Environment	Env Serv	1.2	P	Regltry	Env	Contribution to the Province of Ontario under the Canada/Ontario Agreement on Great Lakes Water Quality.
Can Environment	Env Serv	10.0	P	Infodiss	Env	Contribution to the Economic Commission for Europe's co-operative program for monitoring and evaluation of the long range transport of pollutants.
Can Environment	Env Serv	22000.0	P	Infodiss	Env	Environmental Conservation, Inland Waters Conservation: water research.
Can Environment	Env Serv	7811.0	P	Regltry	Env	The Multiple Resource Conservation Branch deals with toxic chemicals, long range transport of airborne pollutants and environmental assessments.
Can Environment	Parks Cn	25199.0	P	Infodiss	Env	Parks Canada, Agreements for Recreation and Conservation: a % of this figure is spent on toxicology.
Can Environment	Env Serv	7600.0	P	Infodiss	Env	Environmental Conservation, Wildlife Conservation: a % of this figure deals with research on toxicology.
Can Fish & Ocns	Atl Fish	6493.3	P	Infodiss	Env	Atlantic Fishery Management Activity, Fisheries Research: this figure represents the amount spent on toxicology.
Can Fish & Ocns	Pac Fish	1031.9	P	Infodiss	Env	Pacific and Yukon Fishery Management, Fisheries Research. The above figure represents the amount spent on pollution and toxicology research.
Can Fish & Ocns	NWT Fish	3579.0	P	Regltry	Env	Northwest Territories and Inland Fishery Management, Fishery Management Chemical Control.
Can Fish & Ocns	NWT Fish	10318.0	P	Infodiss	Env	NWT and Inland Fishery Management, Fishery Research: effect of pollution.
Can Fish & Ocns	Svcs Fish	21214.0	P	Regltry	Fsh	Services to the Fishing Industry: inspection of fishing vessels, products and processing establishments.
Can Fish & Ocns	Svcs Fish	103791.0	P	Servicep	Fsh	Services to the Fishing Industry, Small Craft Harbours: construction, maintenance and repair of harbour protection.
Can Fish & Ocns	Ocn Sc&S	19276.8	P	Infodiss	Env	Ocean Science and Surveys, Oceanography: the above figure represents the amount spent on pollution research.

Federal *continued*

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Can Fish & Ocns	Personnl	114.0	D	Employer	Lab	The figure represents $4,000 worth of admin. costs as well as the salaries of one safety officer, one temporary clerk and a vacant safety position.
Can Hlth & Welf	Med Serv	19000.0	D	Employer	Hth	To provide occupational health services to federal public servants - the figure in the estimates as $9 mil. There was an increase of $7 mil not shown in the estimate.
Can Hlth & Welf	Hth Prot	16618.0	P	Servicep	Hth	Environmental quality and hazards assesses the health effects of environmental pollutants, toxicology.
Can Hlth & Welf	Hth Prot	3410.0	D	R&E Supp	Hth	Bureau of Chemical Hazards - deals with research on toxicology as well as OSH for lab workers - said they no longer track their OSH-related expenditures.
Can Hlth & Welf	Env Qu&H	5.0	D	Infodiss	Hth	Included in the figure for record 58. Environmental Quality and Hazards: grant to the International Commission on Radiological Protection.
Can Hlth & Welf	Med Rsch	156970.0	P	R&E Supp	Hth	Grant to the Medical Research Council.
Can Inda & Ndev	Personnl	0.0	D	Employer	Lab	We spoke to the official responsible for INDA & NDEV departmental OSH - he was unable to estimate the amount spent.
Can Indn & Ndev	Admin	7325.0	D	Employer	Lab	Amount covers entire admin budget. Official at the OSH Safety Headquarters at DIAND was unable to identify portion spent on OSH.
Can Indn & Ndev	NrthAffr	17852.0	P	Servicep	Hth	Northern Affairs, Native Health Services: provides health services to the native population.
Can Indn & Ndev	NrthAffr	9365.0	P	Regltry	Bld	Canadian Oil and Gas Lands Administration: to ensure compliance with relevant regulation pertaining to oil and gas development - in conjunction with EMR.
Can Indn & Ndev	Non-Renw	58.0	P	R&E Supp	Env	Grant to Chambers of Mines and Resources.
Can Indn & Ndev	Non-Renw	6.0	D	Regltry	Lab	Northern Non-Renewable Resources: grant to the Accident Prevention Association.
Can Indn & Ndev	TechServ	0.0	P	Regltry	Bld	Responsible for construction of capital projects: involves regulation of fire codes and advice to construction workers who are native - no idea of $.
Can Labour	GenLabSv	24426.0	D	CBN	Lab	General Labour Services: combination of regulatory and informational services. Some expenditures are not OSH-related.
Can Labour	Lab Educ	5794.0	D	R&E Supp	Lab	Grants to labour unions for labour education. Included in amount shown for General Labour Services.
Can Labour	Sp Sts	16.0	D	R&E Supp	Lab	Special research studies in the field of accident prevention. Included in expenditures shown under general labour services (record 32.)

Federal *continued*

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Can Labour	QWL	785.0	P	R&E Supp	Lab	Quality of Working Life projects. Included in the amount shown for General Labour Services.
Can Labour	StdsWrtg	10.0	D	Regltry	Lab	Amount is included in record 32. To support Standards Writing Associations, Canadian Standards Association grant.
Can Labour	Inj Comp	50000.0	D	Employer	Lab	Injury compensation respecting government employees and merchant seamen - the figure represents the compensation paid to federal employees.
Can Nat Rsch Cn	Sci&Indr	4520.0	P	R&E Supp	Env	Scientific and Industrial Research Program: environmental quality measure levels of toxic metals and chemical substances.
Can Natl Defens	Personnl	10.0	D	Employer	Lab	Spoke to General Director of Safety for DND. He said there was no way to accurately determine the amount spent on OSH - very rough estimate only.
Can Natl Defens	Mat Supp	547051.0	P	Regltry	Bld	Material Support: defense research, engineering and maintenance services as well as quality assurance which provides an inspection service.
Can Natl Eng Bd	Eng Regn	25261.0	P	Regltry	Bld	Energy Regulation and Advice: regulates the safe construction and operation of oil and gas pipelines etc.
Can Natl Jnt Cl	OSH	200.0	D	Employer	Lab	% on OSH-related grievances. The above figure is only the salaries of the NJC employees. Does not include the expenditures by depts who are members.
Can Natl Rsch C	Sci&Indr	8774.0	P	R&E Supp	Bld	Building Codes and Standards: production and distribution of the national building and national fire codes, as well as building technology.
Can Natl Rsch C	RschServ	8772.0	D	R&E Supp	Gen	Physical Standards: according to the Estimates, NRC is responsible for maintaining OSH measurement standards - no one at NRC to whom we spoke could verify.
Can Natl Rsch C	Sci&Indr	54.0	P	R&E Supp	Hth	Conducts studies of health problems related to toxins, sound, etc.
Can Natl Rsch C	Sci&Indr	2357.0	P	R&E Supp	Trn	Work related to air transportation safety, etc.
Can NCC	OSH	0.0	D	Employer	Lab	National Capital Commission: unable to estimate $ - decentralized activity.
Can Post Office	OSH	52.0	D	Employer	Lab	Includes salary and non-salary dollars.
Can Post Office	OSH	10.0	D	Employer	Lab	Capital expenditures for OSH.
Can Post Office	OSH	5063.7	D	Employer	Lab	Includes salary and non-salary dollars.
Can Post Office	OSH	264.0	D	Employer	Lab	Capital expenditures on OSH at the corporate level.

Federal *continued*

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Can Public Work	Pro&Tech	56744.0	P	Regltry	Bld	Professional and Technical Services Program: responsible for developing standards for the construction and design of federal property.
Can Public Work	Pro&Tech	10.0	P	Infodiss	Gen	Grant to the Canadian Joint Fire Prevention Publicity Committee of Professional and Technical Services Branch. Included in amount shown above.
Can Public Work	Pro&Tech	25.0	P	Infodiss	Gen	Grant to the Canadian Association of Fire Chiefs under the Fire Prevention Section. See comment for previous record.
Can Public Work	Pro&Tech	12.0	P	Regltry	Gen	Grant under the Architectural, Engineering and Technical Services Section to the Canadian Standards Association.
Can Public Work	Personnl	166.3	D	Employer	Lab	The figure represents the salaries and administrative expenses for the headquarters safety office.
Can Stat of Wom	N/A	2779.0	P	Infodiss	Gen	Status of Women: a small % of this concerns the safety of women in the workplace.
Can Supp & Serv	Personnl	0.0	D	Employer	Lab	Responsible for occupational health and safety for DSS - unable to estimate expenditures.
Can Transp Comm	Air Tran	8197.0	P	Regltry	Trn	Air Transport: a % of this deals with the safety of air transport.
Can Transp Comm	RR Trans	8241.0	P	Regltry	Trn	Railway Transport, Safety Regulations: deals with rail safety and the investigation of rail accidents.
Can Transp Comm	Wtr Tran	1885.0	P	Regltry	Trn	Water Transport: a % of this is spent on safety for the general public.
Can Transp Comm	Mot Vehc	1885.0	P	Regltry	Trn	Motor Vehicle Transport: a % of this figure is spent on the safety of truck and bus lines.
Can Transp Comm	CommPipe	0.0	P	Regltry	Bld	Commodity Pipeline Transport Committee: looks after non-oil and gas pipelines to ensure public safety - only one pipeline to look after, therefore no $.
Can Transportn	ShipSfty	21156.0	P	Regltry	Env	Ship Safety: development of regulations governing pollution by ships.
Can Transportn	Emrgencs	6578.0	P	Regltry	Env	Emergencies: acts as a supplement to the ship safety function in the event of spills.
Can Transportn	Mrn Csty	1600.0	D	Regltry	Trn	Marine Casualty Investigation: responsible for the investigation of shipping casualties and crew accidents - received information in writing.
Can Transportn	Mrn Csty	200.0	D	Regltry	Trn	Amount spent on handling public inquiries.
Can Transportn	NavWtsPr	1731.0	P	Regltry	Trn	Navigable Waters Protection: responsible for the review and standards of marine work.

Federal
continued

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Can Transportn	Dang Gds	5200.0	P	Regltry	Trn	Approx 54% of this figure is spent on compliance, 31% on regulation setting, 13% on remedial measures activities, 2% on liaison and coordination.
Can Transportn	Personnl	688.0	D	Employer	Lab	The figure represents the salaries for 11 regional safety officers, 7 district safety officers and headquarters - responsible for OSH for D.O.T.
Can Treasury Bd	PersMngt	0.0	D	Employer	Lab	Personnel Management, General Personnel Management: a % of this is spent on OSH for federal employees - interview with T.B. revealed they couldn't estimate $.

ANNEX B

OSH Expenditures
Fiscal Year
1984 / 85

Provincial

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Alb Environment	Poll Prv	15030.5	P	Regltry	Env	Pollution Prevention and Control: administration of pollution control standards.
Alb Environment	Poll Prv	2767.8	P	Regltry	Env	See above.
Alb Environment	Lnd Conv	1401.1	P	Regltry	Env	Environmental assessment establishes impact assessment guidelines.
Alb Environment	Env Rsch	3137.6	P	R&E Supp	Env	Environmental Research: to coordinate and sponsor environmental research in Alberta.
Alb Environment	Env Rsch	16.7	P	R&E Supp	Env	See above.
Alb Environment	Sp Wst M	675.0	P	Regltry	Env	Alberta Waste Management Corporation operates to ensure that public health is protected from hazardous wastes.
Alb Environment	Env Cons	1215.0	P	Regltry	Env	Administers the Clean Air Act, the Hazardous Chemicals Act and the Agricultrue Chemicals Act.
Alb Executive C	OSH	12542.4	D	Regltry	Lab	Administers the Occupational Health and Safety Act for all Alberta Employees.
Alb Executive C	OSH	234.8	D	Regltry	Lab	See above.
Alb Executive C	WrksComp	16448.4	D	Employer	Lab	Workers' Compensation: payments made to WCB for compensation owed to provincial government employees.
Alb Executive C	NatSciRs	21463.0	P	R&E Supp	Env	Natural Sciences and Engineering Research: to provide research on environmental issues.
Alb Executive C	Disemrgy	1204.2	P	Regltry	Trn	Administers and enforces both the Federal and Alberta Transportation of Dangerous Goods Acts - no money spent as yet as acts are not in operation.

Provincial *continued*

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Alb Executive C	Pub Serv	328.3	D	Employer	Lab	Executive Council, Public Service Employee Relations. Amount shown is overall budget. A % of this is spent on arbitrating disputes over OSH.
Alb Executive C	Personnl	18771.3	D	Employer	Lab	Executive Council, Personnel Administration: a % of this is spent on OSH programmes for all departments.
Alb Labour	Safety S	15606.1	D	Regltry	Bld	Responsible for inspection of boilers and pressure vessels, elevators, potential fire hazards, electrical systems.
Alb Transportn	Trans Sv	10805.6	P	Regltry	Trn	Administers the Highway Traffic Act and the Motor Transport Act.
NWB Brd of Mngt	Labour R	0.0	D	Employer	Lab	A small percentage of this program deals with negotiations over OSH.
NWB Environment	Admin	152.5	P	Infodiss	Env	Provides an information service to the general public on environmental issues.
NWB Environment	Env Serv	153.8	P	Infodiss	Env	Environmental Services, Toxic Substances: provides information to other branches of the Environment Department on toxic substances.
NWB Environment	PollCont	1247.2	P	Regltry	Env	Pollution control services.
NWB Health	Pub Hth	13392.8	P	Servicep	Hth	Public health services.
NWB Lab & ManPw	Admin	1735.9	D	Servicep	Lab	Workers' Advocates: to investigate on behalf of workers those cases that have been refused by WCB - estimate from phone call was 133.4.
NWB Lab & ManPw	Eng Serv	2016.6	P	Regltry	Bld	Engineering Services: sets standards and conducts inspections to ensure compliance with codes for public installations - verified by phone call.
NWB Lab & ManPw	OSH	1104.3	D	Regltry	Lab	Grant to the Occupational Health and Safety Commission which is responsible for administering the provincal OSH act - verified by phone call.
NWB Lab & ManPw	WrksComp	235.0	D	Employer	Lab	Workers' Compensation: to pay for compensation of provincial government employees.
NWB Transportat	TechServ	0.0	D	Employer	Lab	Provides safety training. Deals with compensation problems etc. Has no budget of his own as all his work is charged back to the respective region.
Ont Advsry OSH		355.0	D	Infodiss	Gen	The Advisory Council on OSH provides advice to the Ministry of Labour on the Ministry's OSH programs. Makes recommendations which are then published.
Ont Cons&Comm R	TechStds	8217.4	P	Regltry	Bld	Technical Standards Branch is responsible for administering legislation dealing with safety of pressure vessels, elevating devices, fuels, etc.

Provincial *continued*

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Ont Energy	Conv Eng	1244.3	P	Regltry	Gen	Administration of the Power Corp. Act, Electrical Safety Code.
Ont Environment	EnvPlng	42359.3	P	Servicep	Env	Environment Planning: includes management of air and water resources, waste management, contaminants & stds. Environmental assessments. Lab services.
Ont Environment	EnvContl	37065.9	P	Regltry	Env	Environmental Control: administers regulations on environmental control.
Ont Environment	EnvContl	1.0	P	Servicep	Env	Advances for Emergency Operations: this amount is included in the figure above.
Ont Environment	EnvContl	5.0	P	Infodiss	Env	American Water Works Association (Ontario Section): this amount is included in the figure for Environmental Control $37065.9.
Ont Environment	EnvContl	5.0	P	Regltry	Env	Pollution Control Association of Ontario: See above.
Ont Environment	EnvContl	2000.0	P	Servicep	Hth	Amount included in record 13. Under the Environmental Act Part VII subsidies are provided to provincial health units.
Ont Environment	UtPl&Ops	217958.7	P	Regltry	Env	Utility Planning and Operations Program provides for the treatment of liquid industrial waste, etc.
Ont Environment	Safety	0.0	P	Servicep	Env	Responsible for inspection of sewage and water plants. Salaries of inspection officials are charged back to the client. No idea of $.
Ont Govt Servic	Emp Hth	2494.1	D	Employer	Lab	Ministry of Government Services: employee health and advisory services. Provides health services to provincial employees.
Ont Govt Servic	EmplAdvS	400.0	D	Employer	Lab	Employee Advisory Services, Safety Division: 20-30% is spent directly for OSH, while the remainder deals with the inspection of buildings. Included in above amount.
Ont Govt Servic	Personnl	0.0	D	Employer	Lab	Position has been newly created to deal with OSH related to training policies, to serve as a complement to employee advisory services - no idea of $.
Ont Health	Admi Pro	9014.0	D	Servicep	Hth	Administration Program District Health Councils. A small % of HC's work deals with OSH impacts (for example, testing for asbestos, etc.)
Ont Health	InstHlth	21554.2	D	Servicep	Hth	Institutional Health Program, Laboratory Services: spend a % to ensure x-ray safety.
Ont Health	Pub&Ment	627663.4	P	Servicep	Hth	Public and Mental Health Program.
Ont Labour	OSH	36843.0	D	Regltry	Lab	Includes construction, industrial and mining health safety. Administers the Ontario Occupational Health and Safety Act.
Ont Labour	Ind Rels	905.1	P	Infodiss	Gen	Industrial Relations: quality of working life.

Provincial *continued*

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Ont Labour	Admin	10.0	D	Servicep	Hth	Ontario Labour Administration Program: grant to Blind Workers' Compensation.
Ont Labour	OLRB	4217.0	D	Employer	Lab	Ontario Labour Relations Board: a % of this figure is spent on OSH-related grievances.
Ont Mun Affrs	Admins	1018.9	P	Regltry	Bld	Ontario Municipal Affairs and Housing: building services regulation of building codes and standards. Affects working conditions in offices, etc.
Ont Natural Res	Personnl	2450.0	D	Employer	Lab	This figure represents the salaries of the headquarters office, the salaries of the regional and district safety officers, and WCB comp payments.
Ont Solicitor G	Pub Safe	26936.0	P	Regltry	Bld	Ministry of the Solicitor General: a % of this figure is spent on fire safety services.
Ont Transp & Co	Saf & Re	160.0	P	Regltry	Trn	Ministry of Transportation and Communication, Transportation of Dangerous Goods - above figure includes salaries only.

ANNEX C

OSH Expenditures Fiscal Year 1984 / 85

Municipal

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Calgary City Of	Personnl	913.0	D	Employer	Lab	Occupational Health and Safety Division, Personnel Department: administers OSH programs on behalf of city workers.
Edmonton City	Personnl	829.0	D	Employer	Lab	Occupational Health and Safety Branch, Personnel Department: figure includes employee assistance and benefits counselling as well as OSH expenditures.
Fredericton	Personnl	0.0	D	Employer	Lab	Unable to determine exact expenditures.
Ottawa	Personnl	206.9	D	Employer	Lab	Provision of occupational health for city of Ottawa workers.
Ottawa	Personnl	1060.0	D	Employer	Lab	Includes $60,000 worth of safety equipment purchases and $1,000,000 worth of compensation payments to city of Ottawa workers.
Ottawa	Comm Dvp	1404.4	P	Regltry	Bld	Community Development: inspection of buildings.
Saint John	Personnl	0.0	D	Employer	Lab	Only one safety coordinator - the remainder of the safety work is done by other members of the personnel branch when the need arises - no idea of $.
Tor Bldgs & Inp	Bld & In	8197.8	P	Regltry	Bld	Inspection of buildings according to provincial and municipal guidelines.
Tor City Propty	Air Samp	39.3	D	Servicep	Env	City Property Department: collect and test air samples of asbestos.
Tor City Propty	Eye Wash	25.2	D	Servicep	Hth	Provision of eye wash stations.

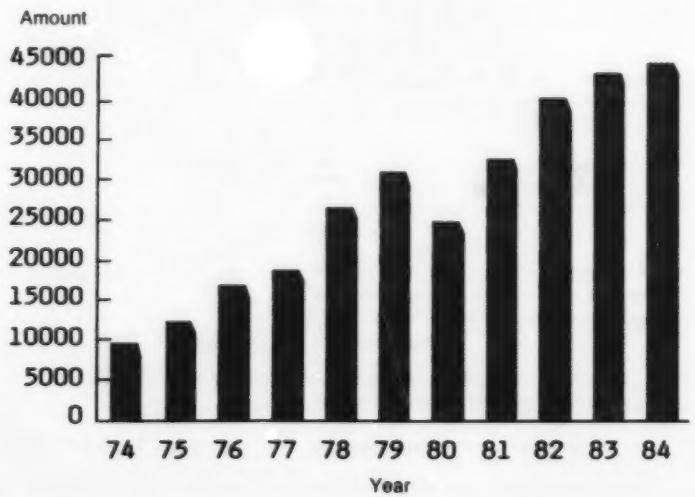
Municipal
continued

ORGANIZATION	PROGRAM	AMOUNT	C	ROLE	SEC	COMMENTS
Tor General Gnt	Injrd Wk	5.0	D	Servicep	Lab	Grant to the Union of Injured Workers.
Tor General Gnt	MTRAC	0.0	P	Regltry	Trn	No grant given to MTRAC rail safety as had been done in previous years.
Tor Labour Reln	Labour R	131.0	D	Employer	Lab	Office of Labour Relations: occupational health and safety for the City of Toronto Workers.
Tor Labour Reln	Comp Pay	296.7	D	Employer	Lab	Compensation payments to City of Toronto workers.
Tor Loc Hth	Local Hth	87.9	P	Regltry	Hth	Local Board of Health: responsible for the enforcement of the Ontario Public Health Act regulations.
Tor Public Hth	Env Htht	552.1	P	Servicep	Hth	Environmental health and inspection.
Tor Public Hth	Hth Prot	247.1	P	Servicep	Hth	Public Health: Health Protection Branch.
Tor Public Wrks	Eng Sect	36.1	P	Regltry	Gen	Engineering Section: noise control.
Tor Public Wrks	Eng Sect	54.3	P	Infodiss	Env	Department of Public Works: general environmental services.
Tor Public Wrks	Gen Serv	752.4	P	Regltry	Bld	General Services Section, General Investigations Branch: responsible for inspection of city buildings.
Tor Public Wrks	Noise	8.3	P	Infodiss	Gen	Noise and vibration study.

ANNEX D

Growth of OSH Expenditures over the past ten years

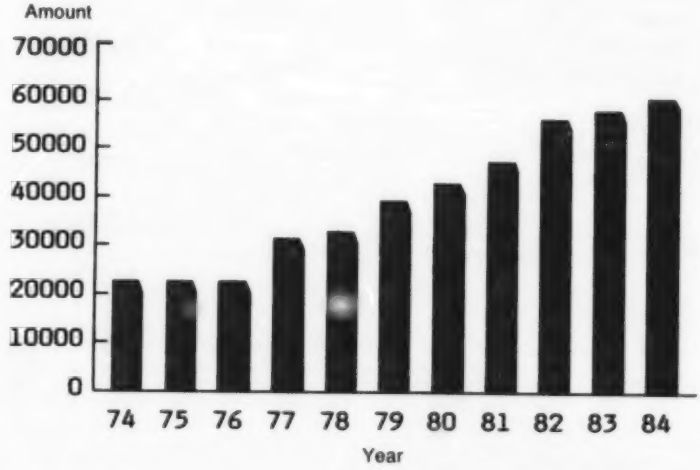
ALBERTA



Data includes expenditures on Occupational Health and Safety, Building Standards and Inspections, and Government Employee Compensation.

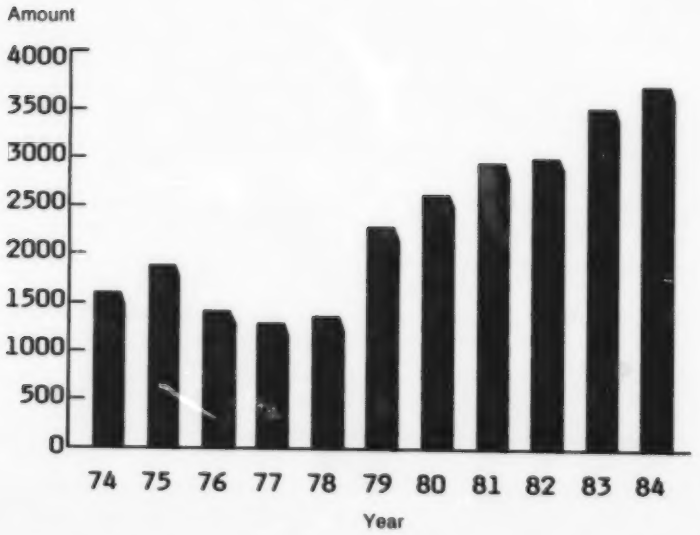
Growth of OSH Expenditures over the past ten years
continued

ONTARIO



Data includes expenditures on Occupational Health and Safety, Building Standards and Inspections, and Government Employee Compensation.

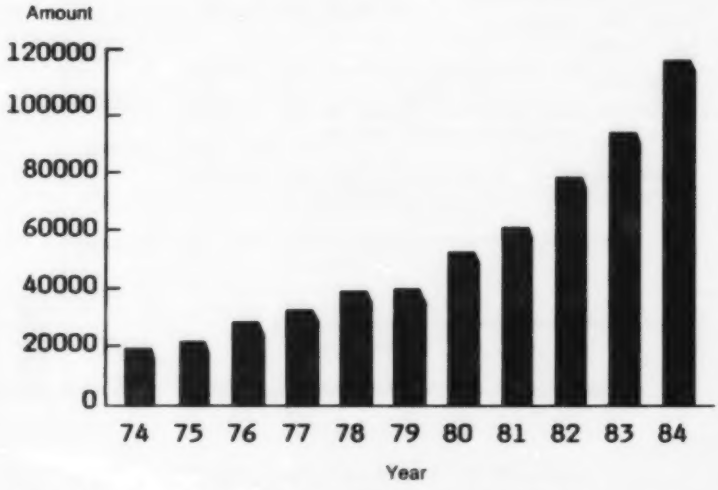
NEW BRUNSWICK



Data includes expenditures on Occupational Health and Safety, Building Standards and Inspections, and Government Employee Compensation.

Growth of OSH Expenditures over the past ten years
continued

FEDERAL GOVERNMENT



Data includes expenditures on Occupational Health and Safety, Building Standards and Inspections, and Government Employee Compensation.